



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Application of Pacific Gas and Electric  
Company for Authority to Increase  
Revenue Requirement to Recover the Costs  
to Deploy an Advanced Metering  
Infrastructure. (U 39 M)

Application 05-06-028  
(Filed June 16, 2005)

**RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES  
TO PG&E'S PETITION TO MODIFY DECISION 06-07-027**

Karen Paull  
Paul Angelopulo  
Attorneys for the Division of Ratepayer  
Advocates

California Public Utilities Commission  
505 Van Ness Ave.  
San Francisco, CA 94102  
Phone: (415) 703-2630  
Fax: (415) 703-4432  
Email: [kpp@cpuc.ca.gov](mailto:kpp@cpuc.ca.gov)

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## **I. Introduction and Summary**

On July 3, 2007, Pacific Gas and Electric Company (PG&E) filed a petition to modify the Commission's July 2006 decision approving PG&E's Advanced Metering Infrastructure (AMI) proposal and authorizing cost recovery for the project (Decision 06-07-027, or "the Decision"). The Division of Ratepayer Advocates submits this response, as permitted by Rule 16.4 of the Commission's Rules of Practice and Procedure.

The Decision directed PG&E to submit, within one year, a proposal for a system that would give customers access to their own AMI-derived usage data. This first attempt at a system, which PG&E calls an "Automated Data Exchange" (ADE), would make five days of usage data available to customers on a next-day basis. In its petition, PG&E seeks a two-year delay in submitting the required ADE proposal, moving the due date for submission from July 2007 to July 2009. For reasons explained below, DRA believes that it makes sense to allow PG&E more time to develop its ADE proposal. DRA supports the development of an ADE system that will further the state policy goals of promoting energy efficiency and reducing electricity demand during peak periods. Realizing progress on both goals will provide value to customers, including residential and small commercial customers. PG&E's petition demonstrates that more work is needed to design such a system, and that in any event, implementation of ADE must wait until PG&E's AMI deployment is further along. Accordingly, DRA recommends that the Commission grant PG&E's request for a delay (of up to two years). DRA further recommends that the Commission provide additional guidance to PG&E on developing an ADE system that will serve customers and further state policy goals.

## **II. PG&E's Request for a Delay Makes Sense in Light of the Revised Deployment Schedule**

PG&E cites three reasons for its request for a delay in developing an ADE: "1) a marketing analysis showed that there was very limited interest in an ADE proposal at this time, 2) there are rapid changes in technology occurring that may impact the methods for delivering real-time data to customers, and 3) the relatively limited number

of activated Smartmeters that will be available in the near future . . .” (Petition, pp. 1-2.) DRA does not find the first two stated reasons compelling, but the third – tied to the progress of the AMI deployment – is.

DRA addresses the third point first (the need to coordinate with the AMI deployment schedule) because it is so simple. An ADE system can only be offered once AMI is operational. PG&E states that as of July 20, 2007, there are “no activated meters with Smartmeter technology” i.e., no activated AMI meters.<sup>1</sup> Activations are not going to begin before September 2007 and by the end of 2007, PG&E only expects to have 89,000 of these meters activated. By the end of 2008, PG&E expects to have 1.8 million meters activated; by the end of 2009, 5 million.<sup>2</sup> According to this schedule, it will take almost a year and a half to reach the 1.8 million meter mark (assuming this schedule is maintained). An ADE program, in contrast, can be implemented in a much shorter time than an AMI hardware deployment, once it has been designed and approved. Accordingly, a delay of one to two years in implementing the ADE program may not delay the program's availability to most PG&E customers by very much.<sup>3</sup>

**III. PG&E’s Market Assessment Report Does Not Show That There Is “Limited Interest in an ADE Proposal.” Rather, It Shows that the ADE Proposal Needs To Be Improved.**

PG&E had a market study done by Freeman, Sullivan, and Co. (“FSC Market Report”<sup>4</sup> and concluded from it that “a marketing analysis showed that there was very limited interest in an ADE proposal at this time.”<sup>5</sup> In DRA’s view, the more appropriate conclusion to be drawn from the report is that the subjects interviewed showed limited

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<sup>1</sup> Declaration of Karen Lang (attached to Petition), p. 6.

<sup>2</sup> Id.

<sup>3</sup> Of course, the ADE system will have to be designed and approved by the Commission before implementation can begin. The Commission has already determined that an application process is the appropriate way to review an ADE proposal. (Decision, p. 57.) Accordingly, the time required for this process must be factored into any revised schedule.

<sup>4</sup> Attachment 2 to the Petition.

<sup>5</sup> Petition, p. 1. see also p. 4.

interest in the ADE proposal as originally conceived. But the report also contains findings that suggest ways the ADE system could be improved to be more useful to customers. In other words, it suggests customers would be more interested if the system were better designed to meet their needs.

It is also important to note that this report tells us *nothing* about the potential interest residential customers may have in obtaining access to their usage data. It simply does not address this question. The “potential target markets” the study focused on are: “1) third party providers who typically develop and package energy services for commercial, industrial, and agricultural (CIA) customers [e.g., Electric Service Providers (ESPs)]; 2) the CIA customers themselves . . . , and 3) Community Choice aggregators (CCAs) . . . .”<sup>6</sup> Residential customers are not among the “potential target markets” identified in the study.

As for the customers in the “target markets” who were studied, many indicated interest in periodic access to a longer historical time period (e.g., a year, rather than the five days in the hypothetical ADE proposal they were asked about). Customers also indicated an interest in real-time access to their usage data (a valid interest, but one that requires a distinctly separate system from ADE). However, “the in-between nature of the ADE proposal, consisting of a rolling, five-day history of day-late data, was viewed by many as having limited value.” (FSC Market Report, p. 19.) Two “key findings” from the customer focus groups are:

“The in-between nature of the ADE proposal, consisting of or rolling, five-day history of day-late data, was viewed by many as having limited value. Real-time access and periodic access to a longer historical time-period were both viewed as more valuable than ADE.”

and

“Even customers who currently have access to interval data on a daily basis through InterAct do not typically access the

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<sup>6</sup> FSC Market Assessment Report, p. 5.

data on a daily basis. These customers however do typically use interval data from InterAct to assess energy efficiency and/or demand response program performance or to obtain historical usage data over a longer period of time to assess changes over time or across multiple locations.” (FSC Market Report, p. 19.)

Thus, the Report suggests that ADE should offer customers historic data (perhaps at customer digital request in hourly, daily or weekly, format over a year’s time) far longer than five-day history.

These findings are worth noting for purposes of designing a system that customers would find useful. They do not, however, support a blanket conclusion that customers are not interested in access to their usage information. In short, the utility needs to follow the recommendations of their own consultant to define parameters of historic data that customers (including residential customers) *would* find useful, and reformulate the ADE program to provide that information.

#### **IV. Changes in technology related to providing access to real-time data are not relevant to PG&E’s ADE system**

One of the three reasons PG&E cites for delaying implementation of an ADE system is that “there are rapid changes in technology occurring that may impact the methods for delivering real-time data [] to customers.” (Petition, pp. 1-2.) PG&E’s ADE proposal would provide access to historical energy use (for example a year’s usage data in a spreadsheet-downloadable format), which is collected by the AMI system and stored in the utility’s data management system. Real-time data directly from the meter certainly has value, but it is not a form of ADE. Thus, developments in technology that may impact methods of delivering real-time data, while they are of interest, are not directly relevant to PG&E’s ADE proposal.

**V. An ADE System Should Be Designed To Further State Energy Policy Goals and To Be Useful to Customers**

**A. The primary purpose of investing in AMI is to promote energy efficiency and reduce demand during peak periods**

In DRA's view, the essential purpose of ADE for residential and small commercial customers (and for many larger customers as well) should be to support the declared state policy of promoting energy efficiency (particularly those energy efficiency improvements that disproportionately reduce peak load) and demand response, as articulated in the Energy Action Plans. Consistent with this policy, ADE should be a tool to help customers make informed decisions about the relative cost-effectiveness of possible improvements to their homes and businesses (for example to heating, ventilation and cooling (HVAC) and insulation) intended to reduce their energy usage. These energy efficiency investments save the most energy during peak energy use periods, with a net impact similar to permanent demand response programs, but without administrative costs or annual incentive payments.

Although the FSC Market Report did not study residential customers, the responses from other customers suggests that a year's information is needed to support customer decisions about investing in energy efficiency improvements, such as home-specific air-conditioning design, heater design, insulation, and window replacement. Consumers would need to be able to provide third-party subject matter experts (electricians, builders, insulation companies, nonprofits, community organizations, etc.) access to their home-specific ADE information to produce home-specific savings estimates for any energy efficiency home improvement. Specific information about the homeowner's energy consumption, made available through an ADE program, would empower consumers to make informed long-term energy consumption decisions.

**B. Ratepayers are funding AMI and should have access to their own usage data**

In its decision approving PG&E's AMI project, the Commission said: "We agree in large part that all customers should have prompt access to their own data.<sup>7</sup> DRA agrees, particularly since ratepayers are being required to finance the AMI investment. The Commission should direct PG&E to design an ADE proposal that provides residential and small commercial customers with access to their own historical data in a useful form, that is, data that will assist these customers in evaluating their energy usage patterns and in making decisions about steps they can take to reduce their energy consumption through ADE-enabled energy efficiency investment, permanently reducing the state's peak load.

If PG&E's original ADE proposal (which the subjects of the FSC Market Report were asked about) were implemented, consumers would have to contact the utility a minimum of seventy three (73) times to compile a year's worth of information, and by necessity wait one year before having a full set of their own data. PG&E should be directed to consider how to give customers access to a years' worth of usage data in a user-friendly form.

**VI. Conclusion**

It makes sense for the Commission to grant PG&E's request for a delay in proposing an ADE program. The Commission should direct PG&E to develop a new ADE proposal under a schedule that would allow ADE to be implemented as soon as there are a substantial number of AMI meters activated (under the current deployment schedule, in approximately two years). The ADE system should provide residential and

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<sup>7</sup> Decision, p. 57.

small commercial customers, as well as larger customers, access to their own usage data, in a way that is useful to customers interested in conserving energy and making energy-efficiency improvements in their homes and businesses.

Respectfully submitted,

/s/ KAREN PAULL

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Karen Paull

Attorney for the Division of  
Ratepayer Advocates

California Public Utilities  
Commission  
505 Van Ness Ave.  
San Francisco, CA 94102  
Phone: (415) 703-2630  
Fax: (415) 703-4432  
e-mail: kpp@cpuc.ca.gov

August 2, 2007



**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of “**RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES TO PG&E’S PETITION TO MODIFY DECISION 06-07-027**” in **A.05-06-028** by using the following service:

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Executed on **August 2, 2007** at San Francisco, California.

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/s/ Joanne Lark  
Joanne Lark

**N O T I C E**

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## SERVICE LIST

A.05-06-028

[sdebroff@sasllp.com](mailto:sdebroff@sasllp.com)  
[cmanzuk@semprautilities.com](mailto:cmanzuk@semprautilities.com)  
[chris@emeter.com](mailto:chris@emeter.com)  
[nsuetake@turn.org](mailto:nsuetake@turn.org)  
[kpp@cpuc.ca.gov](mailto:kpp@cpuc.ca.gov)  
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[jbradley@svlg.net](mailto:jbradley@svlg.net)  
[bill@jbsenergy.com](mailto:bill@jbsenergy.com)  
[jweil@aglet.org](mailto:jweil@aglet.org)  
[Chris.hickman@cellnet.com](mailto:Chris.hickman@cellnet.com)  
[pforke@tejassec.com](mailto:pforke@tejassec.com)  
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[janet.combs@sce.com](mailto:janet.combs@sce.com)  
[mdjoseph@adamsbroadwell.com](mailto:mdjoseph@adamsbroadwell.com)  
[bruce.foster@sce.com](mailto:bruce.foster@sce.com)  
[marcel@turn.org](mailto:marcel@turn.org)  
[bwt4@pge.com](mailto:bwt4@pge.com)  
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[SEB4@PGE.COM](mailto:SEB4@PGE.COM)  
[shaunao@newsdata.com](mailto:shaunao@newsdata.com)  
[edwardoneill@dwt.com](mailto:edwardoneill@dwt.com)  
[lisa\\_weinzimer@platts.com](mailto:lisa_weinzimer@platts.com)  
[lawcpuccases@pge.com](mailto:lawcpuccases@pge.com)  
[barryeisenberg@comcast.net](mailto:barryeisenberg@comcast.net)  
[l\\_brown369@yahoo.com](mailto:l_brown369@yahoo.com)  
[pthompson@summitblue.com](mailto:pthompson@summitblue.com)  
[mrw@mrwassoc.com](mailto:mrw@mrwassoc.com)  
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[Mmesseng@energy.state.ca.us](mailto:Mmesseng@energy.state.ca.us)